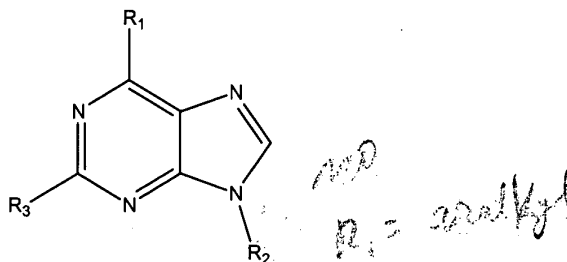


APPENDIX B

Clean Copy of the Claims

IN THE CLAIMS:

48. (twice amended) A compound having the formula:



wherein:

R_1 is $-X-R_1'$; in which R_1' is lower alkyl, substituted lower alkyl, aryl, substituted aryl, hetaryl, or substituted hetaryl, or heterocycle, and X is $-NH-$ or $-SO_2-$;

R_2 is lower alkyl optionally substituted with one, two or three groups selected from hydroxy, lower alkoxy, and halogen; and

R_3 is $-NR_4R_5$; in which R_4 and R_5 independently are hydrogen or lower alkyl optionally substituted with one, two or three groups selected from hydroxy, lower alkoxy, halogen, amino, or carboxyl,

with the proviso that:

when R_1 is benzyl or phenylethyl, X is $-NH-$, and R_3 is NR_4R_5 , in which R_4 is hydrogen and R_5 is lower alkyl of C_{1-4} substituted by hydroxy or amino, R_2 is not methyl or ethyl;

R_1 cannot be cycloalkyl or endo-2-norbornyl when R_3 is halogen, hydroxy, or alkoxy;

R_2 and R_3 cannot both be lower alkyl;

when R_1' is optionally substituted alkyl, the optional alkyl substitution is not heteroaryl;

when R₃ is 2-hydroxyethylamino and R₂ is methyl, R₁-X is not 3-methyl-2-butenylamino, benzylamino, or m-hydroxybenzyl-amino,

when R₃ is 2-hydroxyethylamino and R₂ is isopropyl, R₁-X is not benzylamino, m-hydroxybenzylamino, or 3-methylbutylamino;

when R₃ is 2-hydroxyethylamino and R₂ is 2-hydroxyethyl, R₁-X is not benzylamino and

when R₃ is selected from the group consisting of 2-methyl-2-hydroxy propylamino and 2 dimethylaminoethylamino and R₂ is methyl, then R₁-X is not benzylamino;

or an acid addition salt or cationic salt thereof.

49. The compound of claim 48, wherein X is -NH-.

50. The compound of claim 49, wherein R₁' is lower alkyl, substituted lower alkyl, aryl, substituted aryl, or heterocycle.

Claims 51 and 52 are canceled.

53. The compound of claim 50, wherein R₄ and R₅ independently are hydrogen or lower alkyl substituted with hydroxy or amino.

54. The compound of claim 53, wherein R₄ is hydrogen and R₅ is lower alkyl substituted with amino.

55. The compound of claim 54, wherein R₅ is 2-aminoethyl.

56. The compound of claim 55, wherein R_2 is lower alkyl.
57. The compound of claim 56, wherein R_2 is isopropyl.
58. The compound of claim 57, wherein R_1' is 4-chlorobenzyl, 4-methoxybenzyl, pyridin-3-ylmethyl, or cyclopropylmethyl.
59. The compound of claim 53, wherein R_4 and R_5 are independently hydrogen or lower alkyl substituted with hydroxy.
60. The compound of claim 59, wherein R_4 and R_5 are both 2-hydroxyethyl.
61. The compound of claim 60, wherein R_2 is isopropyl.
62. The compound of claim 61, wherein R_1' is 4-phenylbenzyl, 4-bromobenzyl, 4-bromophenyl, quinolin-3-yl, quinolin-5-yl, quinolin-6-yl, or quinolin-8-yl.

Claim 63 and 64 have been canceled.

65. The compound of claim 49, wherein R_1' is lower alkyl, cycloalkyl, or substituted cycloalkyl, R_2 is lower alkyl, and R_3 is $-NR_4R_5$, in which R_4 and R_5 independently are hydrogen or lower alkyl substituted with hydroxy or amino.

66. The compound of claim 65, wherein R_1 ' is lower alkyl of 1-8 carbon atoms and R_2 is isopropyl.

67. The compound of claim 65, wherein R_1 ' is cycloalkyl of 3-7 carbon atoms and R_2 is isopropyl.

68. A method of inhibiting a cell cycle kinase characterized as CDK2, comprising administering to a mammal in need thereof a therapeutically effective dose of a compound of claim 48.

Claim 69 has been canceled.

70. The method of claim 68, wherein the inhibition of CDK-2 kinase treats a proliferative disease where pathogenesis involves abnormal cell proliferation.

71. The method of claim 70, wherein the disease state is rheumatoid arthritis, lupus, diabetes, multiple sclerosis, cancer, restenosis, host-vs-graft disease, or gout.

72. The method of claim 70, wherein the proliferative disease state is cancer.

73. The method of claim 70, wherein the proliferative disease state is restenosis.

Claims 74 and 75 have been canceled.

76. A pharmaceutical composition comprising at least one pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of claim 48.
77. The compound of claim 59, wherein R_4 is hydrogen and R_5 is 2-hydroxyethyl.
78. The compound of claim 77, wherein R_2 is isopropyl.
79. (Once amended) The compound of claim 78, wherein R_1' is 4-phenylbenzyl, 4-bromobenzyl, 4-bromophenyl, quinolin-3-yl, quinolin-5-yl, quinolin-6-yl, or quinolin-8-yl.
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